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ABSTRACT

Two reviews are presented of "The International Encyclopedia of Higher Education," which was edited by Asa S. Knowles. The encyclopedia contains articles on national systems of higher education of 198 countries and territories, 282 topical essays on international and cross-national issues, and 142 descriptions of study fields. Also included are about 700 short entries providing information on: educational associations, committees and other organizations, centers/institutes conducting research on higher education, documentation and information centers, and reports on higher education policy. Two of the 10 volumes are devoted to author, institution, and subject indexes, a list of acronyms, and a cross-referenced glossary of commonly used academic terms in English and other languages. Short bibliographies for each country, including largely English-language materials are also provided. The encyclopedia consists of approximately 1,300 entries by 588 authors from 69 countries. In the first review, Philip G. Altbach describes the encyclopedia's scope, evaluates the guide, and provides a state-of-the-art review on the status of the field of comparative higher education. Altbach closes with 6 specific suggestions for improving the encyclopedia: (1) disseminate national bibliographic data to the international audience; (2) reduce reliance on American work and become less parochial; (3) economize on production of the encyclopedia in various ways; (4) make group entries by category rather than alphabetically; (5) select more authors from outside U.S.; (6) emphasize comparative insights to national problems. The second review by Ulrich Teichler, addresses primarily the international scope of the encyclopedia and echoes several of the suggestions made by the first reviewer. (SW)

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Ulrich Teichler has since 1978 been director of the Wissenschaftliches Zentrum für Berufsund Hochschulforschung (Center for Research on Occupation and Higher Education) at the Comprehensive University of Kassel, Federal Republic of Germany. After studying sociology at the Free University of Berlin, he was a research associate at the Max Planck Institute for Educational Research (Berlin). His doctoral thesis was a study of higher education and employment in Japan. Author of many books on higher education in relation to employment, manpower planning, university

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admission and selection, and higher education reform, he has been a consultant to the International Labour Office, the International Council for Educational Development, the International Institute for Educational Planning, and the Organization for Economic Cooperation and Development. He has spent major amounts of time in Japan, the USA, and other countries outside Germany. His special interest is in the international comparative aspects of interactions between higher education and social and occupational status hierarchies. He is a proponent of the thesis that a "demand for social inequality," rather than manpower demand, affects the relations between higher education and employment.

BOOK REVIEWS*

International Encyclopedia of Higher Education. Edited by Asa S. Knowles. San Francisco and London: JosseyBass, 1977. 10 volumes, 5208 pages. $400.00

Reviewed by Philip G. Altbach,
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at Buffalo

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Introduction

A multi-volume encyclopedia on a topic which has not previously received systematic attention is difficult to review.* The International Encyclopedia of Higher Education (hereafter called the Encyclopedia) must have been even more difficult to define and compile, and editor Asa Knowles and JosseyBass Publishers deserve our thanks for compiling and publishing this pioneering volume. It is, without question, a major reference tool for higher education and will set a standard for future works in this and related fields. If the mark of success is the usefulness of an encyclopedia as a "first reference" on almost any topic related to higher education, then this set of volumes must be considered a major success. If, on the other hand, an encyclopedia is supposed to define the configurations of a field and provide parameters for understanding it, then this effort can merit only qualified praise.

Without any question, however, the Encyclopedia will constitute a benchmark for the field of higher education for some time to come and it

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*I am indebted to Robert O. Berdahl and Lionel S. Lewis for their comments on a draft of this essay.

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is a key reference tool. It provides more information on more topics in a generally well organized and reliable manner than any other source.

One of the Encyclopedia's major contributions is providing an international consciousness to the field of higher education -- and by implication to other fields in education. Not only is information about higher education in 198 countries and territories provided, but most of the topic essays (282) are specifically international in focus and discuss issues in cross-national perspective. Thus, the reader is forced to consider the international implications of virtually any question, from academic calendars to women and higher education. Policy makers and scholars tend to be country-centered when they undertake research or consider the implications of particular options. The Encyclopedia will help to reduce this myopia by permitting readers to see the cross-cultural implications of particular topics quickly and in perspective. While there are few specific discussions of the relevance of a comparative perspective, the Encyclopedia is a powerful argument for its relevance. It is clear that many countries have had useful experience with such topics as university reform and accountability and these experiences can inform country-related discussions of these and other topics.

The Encyclopedia may be virtually the only

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source in any field of education and perhaps the social sciences generally that provides such a self-conscious comparative perspective. Even the International Encyclopedia of Social Sciences, while covering topics of obvious international relevance, is less directly concerned with the international dimensions. The Encyclopedia helps to prove, by its coverage, that considering the international dimensions of an issue may be helpful in problem solving at the national level.

The Encyclopedia not only provides information and analysis concerning issues related to higher education, but also helps to define a field of study which is emerging into its own.[1] The field of higher education studies emerged as a definable specialty largely as a result of the growth of higher education and the recognition of the importance of universities as societal institutions. This development took place first in the United States, where expansion occurred first, and more recently in Britain, West Germany and other countries. The field was also spurred by the increased trend toward advanced training for academic administrators. Social scientists, management experts, planners, economists and others began to do research on aspects of higher education, and journals were started and books published to reflect this ongoing research and scholarship. The Encyclopedia does not have as one of its aims to reflect the field of higher education studies, but it does in

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fact have relevance to this topic. Many of the scholars now working in the field are among the contributors, and a very high proportion of those involved in the sub-specialty of comparative higher education have written for the Encyclopedia.

The purpose of a review-essay of this kind is not primarily to heap praise on what is clearly a valuable and pioneering effort. It is, rather, to describe and examine the volumes, to indicate strengths and weaknesses, to understand some of the underlying themes and problems, and to assess what we might learn from the Encyclopedia.

Scope and Coverage

With the exception of clearly articulated statistical information, on which the Encyclopedia is relatively weak, there is more information than can be found in any other readily available source. Further, since its coverage is worldwide, it is thereby more comprehensive than some of the excellent publications of groups like the Organization for Economic Cooperation and Development and the Council of Europe, which provide only regional data. While some of the publications of the United Nations and UNESCO provide better statistical data, the Encyclopedia provides a much wider scope of material.

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The Encyclopedia includes approximately 1,300 entries by 586 authors from 69 countries. Many of the entries were compiled by the Encyclopedia's staff. The "internationalism" of the authors is somewhat misleading, since many of the major essays are by North Americans, and contributors from the English-speaking industrialized nations, not surprisingly, dominate the volumes. In length, the entries range from a paragraph to more than thirty pages. The authors include many well known and highly qualified experts on higher education, but the careful reader must question why some other contributors were chosen.

The material in the Encyclopedia is divided into seven basic categories. The two most important categories are "topical essays" covering key issues relating to higher education (282 items or 22 percent of the total) and descriptions of national systems of higher education (198 items or 15 percent).[2] These categories of items are the most useful parts of the Encyclopedia. There are also 142 items (11 percent) covering 'fields of study' (such as astronomy or zoology). The other four categories of items are shorter but nonetheless quite useful: brief descriptions of educational associations, committees and similar organizations constitute 314 items (24 percent); centers or institutes conducting research on higher education total 91 items (7 percent); summaries of noteworthy re-

ports about policy for higher education include 71 items (5 percent); and there are 201 (16 percent) descriptions of documentation and information centers.

The first volume of the Encyclopedia is taken up with a description of the contents and a discussion of the rationale for the project. This volume includes a detailed description of the material listed under each of the categories indicated above, as well as a list of the authors. It also includes a very useful and complete listing of acronyms (practically a necessity in the world of the AAEA and the ZANUT). This listing covers some 87 pages in Volume 1. In addition, a glossary of commonly used academic terms is also included. This listing covers terms in English as well as in other languages and provides succinct and useful definitions. Almost three hundred pages of Volume 1 are devoted to the glossary. The glossary includes cross-references to other similar terms.

The Encyclopedia is alphabetically arranged without regard to any differentiation by topics or themes. Since there are several well defined themes, such as the country analyses and the discussions of specific academic fields, it might have been useful to follow the pattern of the Encyclopedia Britannica in dividing the volumes, at least in part, by themes. In general, the shorter listings, concerning educational or-

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ganizations and similar topics, are clear and succinct.

One of the most valuable aspects of the Encyclopedia, from the viewpoint of the researcher interested in using the volumes as a starting point for further work, is the short bibliographies provided for each country listing and for virtually all of the topical essays. These bibliographies, which include materials mainly in English as well as a selection in other major languages, generally provide a nighly selective but quite judicious guide to related literature. Indeed, it is likely that the short bibliographical guides concerning some less known countries are among the best such guides available. Most of the bibliographies are restricted to a dozen or so listings but some of the substantive essays include longer lists of references. Compilers in general tried to include materials that would be available and the number of government reports and other ephemeral materials that are cited is limited.

Indexes and References

One entire volume of the Encyclopedia is devoted to a series of indexes. The main index is a very comprehensive and generally usable subject guide. This index not only covers particular subjects but also includes reference to organizations, institutions and particular uni-

versities. It provides cross-references to related topics. For example, each country is listed, and references are provided to articles throughout the Encyclopedia which refer to that country, the organizations and associations relating to the country, and similar materials.

The Encyclopedia's tenth volume also includes a name index which may not be of much use to the general reader but which does permit reference to major authors in the field as well as key individuals. In addition to the two indexes provided in volume 10, many individual essays include useful cross references. This permits the reader to locate related articles and data easily and is one of the most valuable reference tools. It is particularly important as there is some overlap among articles and the cross-references permit all relevant discussion to be located relatively easily.

If anything, the Encyclopedia is over indexed. There are, for example, ten pages of cross-reference listings concerning the United States; the usefulness of such elaborate references is questionable. The topic of government regulation of higher education includes six subtitles (such as government regulation of visas and passports) but all of the references are to a single article in the Encyclopedia. While it is helpful to know what is in that particular article, it would not be a great inconvenience

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for the reader to refer to the basic article in question. To this reviewer at least, it would have been better to eliminate some of the elaborate indexes and instead either add more substantive material to the Encyclopedia or to reduce its length and perhaps its cost.

General Evaluation

One must understand the goals which the Encyclopedia has set for itself and judge the effort at least in part on its own terms. Editor Knowles has followed what he feels is a fairly traditional approach to the development of the Encyclopedia. He sees three established primary functions for any encyclopedia: to be a storehouse of knowledge to which both the lay person and the specialist may refer; to be an educational interagent by which readers may be directed to additional material on a subject; and to be a historical record of the state of knowledge in a given field at a particular time.[3]

Because the articles have been prepared so that they will be useful to a general audience, they therefore provide some information which is already known to specialists and the level of generality in some of the articles may leave some specialists unsatisfied. In general, there is a reasonable compromise on this issue when one considers the Encyclopedia as a whole. The topic and the cost of the Encyclopedia make it somewhat

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specialized and it will not appeal widely to a general audience. The large bulk of the readership is likely to be individuals involved in some capacity with higher education, as researchers, administrators, planners or others. It cannot be assumed that the audience will necessarily include specialists on a specific topic, such as financial management of universities, and the international perspective of the Encyclopedia further creates some problems of scope and specificity. In all, many of the major articles deal with this complexity of audience with skill, balancing the needs of specialists with the requirement of presenting basic information about the topic at hand.

Approaching his task with an 'international' viewpoint, Editor Knowles stresses the need for the Encyclopedia in part on the basis of the emergence of an international discourse on higher education. He points to the growing sense of internationalism and interdependency among colleges and universities. Growing numbers of overseas students, increasing international links among specialists in most academic disciplines and international conferences all point to the accuracy of Dr. Knowles' conviction. But the internationality of higher education can be overemphasized and the Encyclopedia seems to be a good example of the strengths and weaknesses of an international approach.

Despite their international links and in many cases historical traditions that relate one university system to another, many involved with national university systems remain highly insular in their awareness and in their orientations. While those concerned with overall policy making may be aware of currents in other countries, many academics have little international consciousness. Further, national policies and practices are often quite unique, and it is difficult to translate easily from one context to another. The Encyclopedia reflects some of these problems with its international focus. For example, while 198 countries or territories are considered, some are dealt with in much more detail than others. And there are some odd discrepancies. Barbados (population 250,000) and the Bahamas (population 198,000) each have articles of seven pages devoted to them, while Bangladesh (population 71,000,000) has warranted an article of six pages.

The largest problem with the international approach is perhaps inevitable in a set of volumes edited by an American and published in the United States, and that is overstress on American authors, data, and experience. Part of the problem is simply the bulk of American materials relating to higher education. While it is difficult to provide an accurate estimate, it is likely that at least half of the world's literature on many topics relating to higher education

is American. For example, bibliographical volumes prepared on student activism indicate that a majority of the literature surveyed is American.[4] The United States is the only country with a large group of academics and researchers focusing their attention on post-secondary education. A large percentage of the relevant journals are published in the United States - although the field of higher education is developing in other countries at a rapid rate, and particularly in Britain, West Germany and Japan. Nevertheless, the American dominance of the field has skewed the Encyclopedia and this detracts from the internationalism of the volumes.

Quite a few of the topical essays written by American authors are predominantly American in orientation. The article on affirmative action, for example, is eleven pages in length and is totally United States based. It would have been possible to consider the policies that some other countries, like the USSR, India or East Germany, have followed to ensure minority representation in higher education. An excellent article on academic evaluation, mainly theoretical in nature, covers mostly American writings and uses American examples. The essay on faculty unionism covers chiefly the United States, with some attention to Britain. This is a shame since the experience of Britain, Japan, West Germany, France and other countries is important. There are also some fine chapters which are

self-consciously comparative in their coverage, but the reader is struck by the United States orientation of much of the material in the Encyclopedia.

The editors, with the assistance of an international advisory board, tried to include cross-national material in the Encyclopedia, and in general they have been successful. The problem occurred in the selection of authors for the thematic essays, many of which have lost the cross-national flavor. This is due, in all likelihood, to a combination of the insularity of some of the American contributors and the fact that some of the themes, such as "accountability" and "affirmative action" developed out of the American experience. A rather limp six page essay on fraternities (there is no article on sororities) concerns only the United States and does not mention the very important German tradition in this area.

This Encyclopedia bears the stamp of its editor-in-chief, Asa Knowles, former President of Northeastern University and a well known scholar of higher education. Dr. Knowles edited the highly successful Handbook of College and University Administration (McGraw-Hill, 1971) and has experience in developing reference volumes of this kind. The Encyclopedia bears witness to Dr. Knowles' thoroughness and wide coverage of the field. But it also indicates some

overreliance on individuals from the Boston area and some lack of knowledge of or contact with some of the key people working in various countries, despite an impressive advisory committee. The vagaries of obtaining a commitment to write an essay for an encyclopedia of this kind, particularly when many essays were commissioned, are substantial. Many key names are notable, however, by their absence from this volume. Many of the country-essays were written by Encyclopedia staff and based on data supplied by education officials in the countries involved. These essays are, in general, not as insightful as those written by experts. It would seem that some extra effort could have produced more indigenously -- authored country essays.

The Encyclopedia contains curious gaps in its coverage. Again, in a massive effort like this one, there will be inevitable lapses, but some of these are indicative of weaknesses in the undertaking. The topical and national bibliographies which are in general so useful as guides to the literature are sometimes less than fully adequate. For example, there is an informative essay on the University Grants Committee but no mention is made of the 'classic' study on this topic by Robert Berdahl.[5] The bibliography included with an otherwise excellent (if overly general) essay on student activism does not include many key references. One could go on. One wonders about the choices

of some of the topics and the exclusion of others. For example, there is a useful essay on the sociology of higher education but none on the politics of higher education.

Many questions occur concerning the choice of topics and the space allotted to particular themes. For example, the relevance of a thirty-three page essay on legal aspects of faculty unionism in the United States is highly questionable in an international encyclopedia. Devoting eight pages to a discussion of the Smithsonian Institution is totally unjustified. Many major nations do not receive that much attention. The section on libraries includes not only a generally useful essay on academic libraries, but there are thirteen essays dealing with specific libraries in the United States, the USSR, Japan, West Germany, France. Five of the essays are on American libraries, including one, inexplicably, on the Boston Public Library but none of the University of Illinois Library, one of the largest and best in the US. The choice of libraries, and the justification for taking up space with such discussions, is unclear to this reviewer. The relevance of a half-page article on the Association of Teachers at the Royal University of Malta or one and one half pages on the Israel Academy of Sciences and Humanities is also unclear.

On the other hand, many of the topic essays

reflect excellent judgment in terms of the selection of topics. A major section on science policy is included, covering fourteen separate essays, although it is curious that Western Europe is covered in a single general chapter while Canada and Australia have their own chapters. An excellent selection of essays on religious influences on higher education is included, and coverage is given to such non-mainstream religions as Taoism. Seven articles deal with women in higher education, reflecting a concern with issues which have immediate relevance.

The Encyclopedia is an "establishment" series of volumes. One will find little criticism of established educational practice and few dissenters among the contributors. Virtually all of the contributors are, seemingly, senior established figures in their fields. For example, the author dealing with 'participatory democracy', one of the rallying cries of the student movement of the 1960's, is the president of an American college. That essay discusses the role of students in academic governance in several countries, but hardly touches on the student movement which, in almost all cases, stimulated the moves toward participatory democracy in higher education. Nor does the bibliography cite any of the fairly extensive literature which deals with this issue from the viewpoint of the student movement. Similarly, the essay

on campus unrest, which provides fairly wide geographical coverage of the student movements of the 1960's, does not include much concerning the underpinnings of the student movements or any serious discussion of the student viewpoints.

Many academic disciplines reflect rather serious methodological or ideological differences. In general, the essays on the fields of study do not analyze such divisions. Further, fields of study often reflect national differences in approaches and these are generally glossed over. As will be discussed in some detail later, the decision to include essays on many academic specialties is a questionable one from the perspective of this reviewer. Nevertheless, despite some quirks and some weaknesses, the Encyclopedia in general provides reliable and objective information on a large number of topics. The reader can be fairly certain of obtaining an overview of a topic or country, an accurate description of an organization or association, a correct address, and a reliable guide to further study.

The "Disciplinary" Essays

The Encyclopedia has attempted to provide coverage of the major academic disciplines, both pure and applied. Essays of from four to fifteen or more pages dealing with fields from ac-

countancy and actuarial science to urban design and wildlife ecology and management are presented. Each essay is written by a faculty member in the field. In all, 142 fields of study are included. Each essay includes such useful information as the key journals in the field, major abstracting services, levels and programs of study, and principal sources of information (including general references, encyclopedias, and bibliographies). Disciplinary organizations and associations were consulted to make sure that the discussions of each field were accurate and up to date.

The most important of the essays deal with the "mainstream" academic disciplines such as physics, philosophy, sociology. These essays are, in a sense, too short to provide even a general reader with a feel for the nuances of the historical development and current status of a key field of study. The essay on physics is a good example. It is seven pages in length, with four pages devoted to a short essay by the chairman of the Department of Physics at Northeastern University in Boston. The essay devotes a paragraph or so to the various subfields of physics. A half-page is devoted to the historical development of the field. One page covers a general discussion of academic programs in physics, although this description does not include any basic differentiation between undergraduate and graduate programs, or any discussion of par-

ticular national differences in physics programs or degree structures. A final four pages are devoted to a listing of major international organizations and a selection of national groups (Australia, France, Italy, the UK and the United States) in the field, a listing of principal sources of information such a bibliographies, guide books to the field, key periodicals, and a listing of encyclopedias and handbooks.

Political science rates nine pages and was written by the Chairman of the political science department at Northeastern University in Boston. The essay touches briefly on the major subfields in political science, sketches the history of the field from its "prehistory" to current developments, and includes a brief mention of currents in West Germany, Scandinavia and in Eastern Europe. The bulk of the discussion, however, relates to the American experience. It stresses the efforts of the field to develop in a "scientific" direction in the past half century or more and mentions some of the criticisms made of this current in the field. There is a brief consideration of degree programs at the undergraduate and graduate level, although the generality of this discussion precludes much detailed understanding of academic programs. For example, it is not clear from the discussion that graduate (post-graduate) degrees in British universities or in British-influenced academic systems are earned by the submission of a thesis

and without extensive course work, as is common in the American system. The names and addresses of the major international and regional associations and of national groupings in eleven countries are provided (although the selection of countries is somewhat odd: why Israel but not India? No Latin American countries are represented). Major journals in English, French, Spanish and German are listed, as are major bibliographical tools, guidebooks, encyclopedias and the like.

As a final "mainstream" discipline, I chose mathematics. This field is allotted seven pages, with three being devoted to the essay. Written by a professor of mathematics at the University of Massachusetts, the essay provides a definition of the field and a very brief discussion of its historical development. Virtually nothing is mentioned about the various subspecializations within mathematics, and it is difficult to believe that even with mathematicians well-known parsimony with words, the field has been adequately covered in an essay of three pages. The additional pages contain documentary information.

We may now turn to a few randomly chosen "minor" fields to investigate coverage provided here. Marketing as a field of study has seven pages devoted to it and the essay of three pages was written by the secretary of the Academy of

International Business at Roosevelt University in Chicago. The field is basically an American invention and it is not surprising that the bulk of the essay is devoted to the development and status of the field in the United States. A few paragraphs are devoted to a consideration of the study of marketing in several other countries. A very thorough bibliographical and reference section is provided as well.

Eight pages are devoted to the field of environmental studies, with a three page essay authored by a staff member of Threshold, Inc., of Washington, D.C. The essay focuses on the problem-centered rather than disciplinary oriented nature of the field and stresses that the field has developed quite recently out of an international concern for the environment. Although the essay deals with the international aspects of the field, more than half of the world's environmental studies programs are located in the United States and the listing of relevant literature and documentary sources reflects this American orientation. Other minor fields, such as actuarial science and automotive technology, generally have coverage of from five to eight pages.

Cookery has been listed among the fields of study. Two authors, one from a Boston area community college and the other the librarian of the Culinary Institute of America, have written a

two page essay on the field, followed by two and one-half pages of information and documentation on the field. The essay deals almost exclusively with the development of cooking and the modern food service industry. The bibliography is largely devoted to cookery books. It would seem that there is almost no literature on the field itself, and little indication that this field is a disciplined subject of academic study.

Finally, one may mention the treatment of retailing as a field of study, with a five page entry (including a two page essay authored by the chairman of the Department of Management at Simmons College in Boston). Retailing generally falls under the general field of marketing and claims its own journal. But if the literature cited in the bibliography is any indication, there has been little concern with the development of retailing as a field of study. There is some interest in the teaching of retailing in other countries, although the bulk of attention seems to be in the United States.

As can be seen from these fields of study, the subjects represented in the Encyclopedia range from well-established academic disciplines, through widely recognized emerging interdisciplinary specialties such as environmental studies, to fields which seem to be ephemeral to a serious consideration of higher education and to the world of knowledge. Moreover, a few

fields have been somehow left out of consideration. While there is an essay on comparative higher education, there is no essay on comparative education as a field of study despite the fact that this field is an established specialty in a number of countries, claims a half-dozen journals and a wide literature, and is directly related to the concern of the Encyclopedia. Further, a serious question may be raised relating to the authors of many (by no means all) of the essays. A large majority are American, and one will find relatively few prominent scholars among the authors of the field of study essays.

The essays do not, in general, break much new ground. Most are competent summaries of established knowledge in the fields under consideration. Appropriate definitions are provided, a thumbnail sketch of the field is presented, and an effort is made to deal with current developments in these fields. While virtually all of the essays try to deal with non-American currents and materials, many are too dependent on U.S.-based definitions, scholarly concerns, and methodological orientations.

The rationale for including material on the fields of study provided by editor Knowles is that the Encyclopedia provides the most complete such compilation available. To this rationale, he might have also argued that such a taxonomy

academic administrators and others when restructuring institutions or faculties or when adding new fields. But to this reviewer, the long term usefulness of these essays is unclear. A clear description of an academic field is not an easy task -- in some cases success has been achieved but in others the essays are somewhat unclear. For established fields of study, such as political science or physics, a short essay of a few pages hardly does justice to the field. At the same time, the inclusion of such fields as marketing or cookery is highly arguable. There is too much on some fields and too little on others. In the last analysis, it might have been useful to have devoted one of the volumes of the Encyclopedia to a guide to the fields of study, but perhaps omitting the essays and including mainly the bibliographical, journal and literature summaries which are included at the end of each of the essays. Overall, I found the field of study materials the least satisfactory part of the Encyclopedia both in terms of the suitability of some of the ewsays and in terms of the basic rationale for the inclusion of this kind of material.

The "Topical" Essays

For this reviewer, the essays dealing with specific aspects of higher education are the intellectual heart of the Encyclopedia. They pro-

vide sustained and in many cases literate and analytical treatment of key issues relating to higher education. Many prominent scholars in higher education and experts on the topics under consideration are found among the authors. In some cases, the essays on a particular general topic are grouped around a theme, and this is quite useful for the reader. For example, forty pages and six individual essays are devoted to manpower planning. The essays in the group include considerations of such topics as the migration of talent, the role of government in planning, and the role of higher education in manpower development.

The topical essays represent the most interdisciplinary aspect of the Encyclopedia, and provide the best opportunity to present a range of perspectives on specific issues relating to higher education. In this sense, they permit an evaluation of the "state of the art" of the field of higher education studies, a topic that will be considered later in this essay. The authors, in general, consider their respective subjects from a fairly broad perspective and try to incorporate insights from different disciplinary approaches. Then try, with varying success, to include data from a range of countries. Further, the topic essays reflect the most innovative approaches of the Encyclopedia's editors in terms of selecting topics, grouping them for clarity, and selecting authors. While there are

a considerable number of essays which are largely descriptive and do not add much to our understanding of the frontiers of knowledge of a subject, and a few contributions which do not show even basic analytic skills, most of the essays are of a good standard of quality and reflect judicious selections of both authors and topics.

These general categories permit "in depth" coverage of a range of topics, and it is worthwhile to indicate some of these topics and examine the specific essays clustered around them. To provide a flavor of the concept, a few clusters have been selected for discussion, somewhat at random. Religious influence on higher education includes eight separate essays and a total of sixty pages. The essays are in general well informed, scholarly, and provide both historical and contemporary information. The idea of including extensive coverage of religious influences is original and highly useful and has provided a series of discussions that will be a benchmark for further consideration of this interesting but almost completely neglected aspect of higher education studies. Another topic which has only recently been recognized as important in the study of higher education is that of women and higher education. The Encyclopedia includes seven separate articles and a total of thirty-nine pages devoted to the topic. Among the topics considered are access of women to higher education, women's colleges, equal rights

and affirmative action, and women as international agents of change. In general, the material is quite U.S.-oriented and this detracts somewhat from its overall usefulness.

It is fitting that a section of ninety pages should be devoted to "international exchanges" in higher education in an Encyclopedia focusing on international issues. However, one may question whether this particular aspect of internationalism deserves so much attention when other topics, such as the role of higher education in international development (which does merit an excellent single essay) received much less attention. Among the individual essay topics in the international exchange segment are the international student, travel abroad, teaching and research exchange, campus international offices and government regulations concerning international exchanges. Several of these essays are relevant mainly to the United States and several others are to questionable relevance to an Encyclopedia of this kind. In a sense this section on international exchanges is too much concerned with the details of exchange problems and not enough with the sociological and historical aspects of the exchange process, with the adjustment, and other problems of overseas students (on which there is a significant literature) and with other, more 'theoretical' issues. Indeed this is a problem with many of the essays -- they are too applied in their fo-

cus and not sufficiently theoretical.

Not surprisingly for an Encyclopedia published in 1977, there is a group of four essays covering thirty-five pages on the financial affairs of higher education. The essays include such topics as cost analysis, accounting and financial reporting and budgeting and investments. All of the authors are working in American higher education, and the section is highly U.S.-oriented. The essays, while quite informative and detailed, make little mention of the societal implications and relationships of the financial arrangements of higher education. They are, rather, concerned with the detailed fiscal mechanisms of higher education. The societal elements are considered in two, much shorter, essays on the financing of higher education. These two essays deal with the financing of institutions and systems and with university grants committees. The essay on financing is much too "American" although it does focus to some extent on other countries, and the University Grants Committee essay covers mainly Britain but does not pay much attention to the other countries which use the grants commission model, such as India, some Canadian provinces, Israel, Nigeria and some others.

The applied focus of the Encyclopedia is exemplified in two interesting sets of essays; on 'manpower planning' and on 'planning development

and coordination' of higher education. Forty pages are devoted to manpower planning and a similar number to planning. Such topics as the migration of talent (the loaded word "brain drain" has been avoided), the role of higher education in manpower development, and the role of government are all considered in separate essays. One essay, on the role of industry, seems of questionable relevance in this Encyclopedia. This essay deals only peripherally with higher education and uses American data almost exclusively. The section on 'planning, development and coordination' is a model of international concern and relevance. Most of the chapters, devoted to such issues as institutional planning, regional planning, international educational planning, and state planning in U.S. higher education, are informative and almost all deal with their topics in cross-national perspective. This is probably one of the most effective sections in the Encyclopedia, as it provides both national data from a number of countries and also a good general overview of the topic under consideration. The essays have been chosen judiciously and none seems out of place.

Research, appropriately, is a theme which has six essays and a total of fifty pages devoted to it. This theme is important and the essays, dealing with such topics as the history, purpose, and organization of academic research, the administration of academic research, and in-

ternational research, are all relevant and clearly articulated. The authors are from several different countries and all bring an international consciousness to their writings.

Science policy, interestingly, claims one of the longest series of essays, covering 105 pages in fourteen separate chapters. All except one 'overview' essay deal with specific countries or regions. The geographically based essays are divided into categories dealing with industrialized nations, industrialized planned economies, advanced developing countries and less developed nations. The essays are uniformly informative and provide an overview of the development and current status of science policy in the countries under consideration.

Several essays seek to provide an overview of the field and its literature, and they are of varying quality. Scattered throughout the Encyclopedia, they are in several cases rather misleadingly laeled. An interesting essay on comparative higher education does an admirable job in characterizing a diverse field; it indicates that the field is not a discipline, in the sense that there is no agreed methodological focus. The chapter describes some of the foci of research and writing in the field, but pays no attention to the broader field of comparative education, from which comparative higher education has received much of its impetus.

An essay on the sources and access to the literature on higher education complements the consideration of the field, but is located in a different volume. This chapter discusses the literature of the field in general terms and provides some useful bibliographical material. Overall, however, the essay is too general and does not provide either an analytical discussion of the kinds of literature in the field or a wide ranging practical guide to the literature.

Even less adequate is an essay on the periodicals of higher education. This essay does mention most of the major higher education journals but in the context of an ill-conceived laundry list which includes the Tasmanian Journal of Education (Australia) and Message of the Teacher (Jordan), both of which are largely irrelevant to the study of higher education and in any case not widely available. Other clearly more relevant journals, such as New Frontiers in Education (India), have not been mentioned. The entire literature of comparative education, including such journals as Comparative Education (Britain), Comparative Education Review (USA) and Canadian and International Education, receives no mention. The excellent and highly international UNESCO-related journals such as Prospects and the International Review of Education also have been ignored. All of these publications provide considerable coverage of higher education on a regular basis.

There are a large number of generally useful single topical essays which provide insights into aspects of higher education, include bibliographical references at the end, and are for the most part well written and analytic in nature. Important topics as mass higher education, university reform, sociology of higher education, campus unrest, academic freedom (too American oriented), and the history of higher education (a particularly outstanding contribution) are all considered in the Encyclopedia. Some excellent essays, such as the one on the legal aspects of higher education, are completely limited to the American situation and this weakens their usefulness. And a few are clunkers, such as the essays devoted to 'faculty' (academic profession) and fraternities.

In general, the topical essays are competently done and informative. But with a handful of exceptions they are far from being brilliant expositions. Perhaps this is in the nature of an encyclopedia, but it seems to this reviewer that with a more careful selection of some of the contributors and perhaps more thorough editorial guidelines, some of the essays might have been improved. The topics, in general, provide wide coverage of the most important questions facing higher education. It is possible that the Encyclopedia is too contemporary in the sense that it is concerned to a significant extent with issues of current relevance. Rela-

tively few essays provide major historical perspective. As a source of guidance for researchers, for an overview for planners and government officials, and as a general introduction to specific topics, these essays will generally be satisfactory.

Some of them will stand the test of time and provide a sketch of a topic that will be useful for many years. However, relatively few have this degree of excellence since they are often not long enough to fully develop a topic, are too shallow in their coverage, or are too present-oriented. Perhaps it is too much to expect, in a first effort at defining a field, that materials will have lasting relevance. Nevertheless, the essay section of the Encyclopedia provides some of the most original analyses and interesting insights into the field of higher education.

The National Listings

The higher education systems of 198 countries and territories are surveyed in the Encyclopedia. There are extensive articles (usually four to eight pages in length) concerning 136 countries. Since the articles are fairly uniform in nature, it is possible briefly to indicate their general content and to provide a critique of this segment of the Encyclopedia. The essays are clearly organized and include infor-

mation on the historical development of higher education, relevant legislation, the relationship between the various levels of the educational system, the structure of the degrees, and aspects of the financing of higher education. Data on the teaching staff is included and in general there is a range of information pertaining to national higher education systems. Bibliographical references and the names and addresses of key educational organizations are provided as well, as are cross-reference guides to other material in the Encyclopedia relating to the country question. Some statistical information is provided for most countries. For many countries, for example, there is no indication of the numbers of teaching staff and although basic facts about numbers of students and institutions do exist and could have been cited, they are not given. It would have been useful to provide more statistical information, particularly to provide a historical view of the university systems. In addition to the country listings, there are several regional essays (such as for sub-Saharan Africa, South Asia, etc.). These essays provide a useful overview and are in general nicely comparative in nature. They permit the reader to generalize about regional trends.

The essays which are individually authored are by far the best ones. They tend to be somewhat analytical and in general show a better

feel for the country. No doubt, the Encyclopedia staff could not locate competent individuals to write some of the essays, but it would have been better if more of the essays had been written by individual experts.

There are some oddities among the country essays. Some large and important countries receive less attention than some extremely unimportant nations. For example, Burundi, which has 774 students enrolled in universities, receives five pages of text while Canada, with 314,000 in universities, has eight pages of text.

In some cases, such as India, West Germany and Japan, which have highly complex and quite large university systems, the complexities and nuances of the systems are not fully portrayed. This is not the fault of the authors of the essays, but rather to the limited space available. It might have been appropriate to permit longer essays for large and complex systems of higher education and to have cut down on the length of some of the very small systems.

Oddments

The Encyclopedia provides several categories of information which yield shorter listings and are aimed at providing basic information.

Among these are the names and addresses of 314 national, international and regional educational associations, organizations, societies, committees. and commissions. There are 91 references to centers and institutes of research on higher education. There are 71 short listings concerning important reports on higher education. There is a listing of documentation and information centers on higher education. At the end of Volume 9, there is a listing of 201 centers that deal with higher education, along with their addresses and an indication of the scope of their work. Most of this information is useful and has a place in the Encyclopedia.

Most of these short references are inserted individually in the alphabetical listings of the Encyclopedia. It would have been clearer to include separate categories. The relevance of including fairly extensive listings on research centers and organizations dealing with higher education in the text of the Encyclopedia is particularly questionable. The audience for a half page listing on the Bavarian State Institute of Higher Educational Research and Planning or a half page on the Committee of University Principals of South Africa will be exceedingly small. There are numerous references of this sort that could have been shortened and more constructively placed together toward the end of the Encyclopedia. Some of the organizational listings are somewhat confusing. For example,

the Comparative Education Center (United States) refers to the well-known Center at the University of Chicago. There are, however, several other such centers with the same or very similar titles in the United States and these are not mentioned.

There is a better argument for including the references to reports and documents relating to higher education in the main text of the Encyclopedia, but even these materials might have been more effectively listed in a section toward the end of the volumes. The Encyclopedia provides a short summary of a number of important higher education documents. Some are not given sufficient space, such as the crucial Cordoba Manifesto, which signaled a major reform in Latin America in the early 20th century. Other documents are given too much attention, considering their minor importance to a broader higher education audience.

These shorter listings are a valuable asset to the Encyclopedia, and they help to make it the key storehouse of information that it is. One might quibble with the relevance of some items or the placement or arrangement of some of the categories of materials, but in general the Encyclopedia provides a valuable and accurate service in painstakingly listing the organizations, reports, documents and agencies discussed in this section.

The State of the Art

This review of the Encyclopedia provides an excellent opportunity to reflect on the status of the field of comparative higher education. This field has emerged recently and is linked both to the field of comparative education and to the national study of higher education that has emerged as an academic concern in the United States and to a more limited extent in Western Europe and Japan. The Encyclopedia is indeed a milestone in the emergence of higher education as a field of study in an international as well as in a national context. A set of volumes of this magnitude would have been impossible even a decade ago, as the sources of documentation and the number of specialists would have probably been too limited at that time. The Encyclopedia has made use of most of the specialists in the field as consultants, members of the advisory board, and contributors. In this sense, it is possible to observe the nature and quality of work in the field.

There are a number of observations about the field which are evident from the Encyclopedia. One is the emergence, albeit on a limited scale, of truly comparative analysis of higher education topics. The Encyclopedia includes much material which concentrates on national systems of education, and many of the general essays are not comparative enough. But

there are a number of the topical essays which are impressively comparative in their scope. It is unlikely that so many scholars from a number of different countries would have been able to prepare such an array of comparative material a decade ago. Indeed, the Encyclopedia's editors made use of the organization of the field in preparing the volumes. It is now possible to obtain relatively good basic data from agencies such as UNESCO, the Organization for Economic Cooperation and Development, the Council of Europe, and other regional, national and international agencies. There are a relatively large number of full-time professionals working on higher educational research in universities, government agencies, foundations and international organizations. Virtually all industrialized nations have established formal research institutions devoted to higher education; many of these agencies are less than a decade old. A growing number of Third World nations have also established research capability in higher education. India, for example, claims three scholarly journals devoted specifically to higher education.

University-based centers for higher education studies have emerged in a number of countries. To date, only the United States has established a field of doctoral specialization in higher education, and in the U.S. a growing number of specialists are obtaining doctoral degrees

in the field and using this expertise for research, administration and policy making. There are signs of similar development in Britain, Japan, and West Germany. Very few university centers or departments of higher education pay attention to international aspects of the field, particularly in the United States, and this has hindered the emergence of comparative studies on a wider basis. But the growing number of academics engaged in higher education studies provide a base for the development of a consciousness concerning comparative higher education and some gradually develop an interest in the topic as the relevance of comparative research and a knowledge of higher education problems in other countries becomes more evident.

The Encyclopedia demonstrates that a generally adequate data base for comparative analysis now exists, and indeed it should be credited for the partial codification of that data base. Further, the Encyclopedia provides the most comprehensive listing of organizations, research centers, documents and bibliographical material on the topic yet available. This further eases the tasks of comparative research. It is now possible for scholars, policy makers and others to look at the experiences of other countries in debating and planning educational policy in a given nation. Many of the relevant documents and references are provided in the Encyclopedia. There is a growing awareness that the experience

of Japan or West Germany with entrance examinations may be of relevance to similar discussions in the United States or Egypt.

There is, of course, a difference between policy-related discussion utilizing insights from other countries and truly comparative research. Comparative research, in the disciplined and scientifically rigorous sense of the term, is expensive and only rarely conducted. Yet, such research often yields significant results and can form the basis of applied discussion. A model for large-scale comparative research is the International Study on Educational Achievement, undertaken at the secondary school level by an international research consortium some years ago. This project was expensive and complex and fraught with numerous methodological and logistical problems, but it yielded a wealth of data which is still being debated.[6] There have been very few comparative studies of similar scope relating to higher education. One of the few is a research project on access to higher education, directed by Frank Bowles.[7] Other studies have made use of comparative data, but few have generated original data on an international scale.

Small scale comparative research, undertaken with the support of international agencies, foundations or regional organizations is by now an established part of the field and of-

ten yields useful results. A German-American study on access to higher education, conducted under the auspices of the International Council for Educational Development, is an excellent example of this type of research.[8] By careful selection of topics, the use of methodological approaches from the social sciences, and often the involvement of experts from several countries, such studies can provide valuable insights. Since the topics of the research are often limited, it is possible to control variables and to develop research designs which are not excessively expensive.

The Encyclopedia also indicates that the field of comparative higher education has certain weaknesses. If the Encyclopedia is any indication, the field tends to be descriptive rather than analytical in its approaches. This may be a somewhat unfair criticism, given the limited purposes of any encyclopedia, but it is likely that the field has yet to develop analytical paradigms with which to analyze higher education. It is not surprising that a field in its early stages of development should have this characteristic, as it is still in the process of identifying a proper focus for inquiry and modes of analysis. It is also possible that a field like comparative higher education, because its purview is so broad and it necessarily examines higher education from a variety of disciplinary perspectives, will find it difficult to develop

clear paradigms and research strategies. The field is not a discipline, and probably cannot become one even with the most rigorous scholarship. It is, rather, a subject for inquiry utilizing a variety of disciplinary perspectives.

The nature of the field, despite the lack of a core discipline, does not preclude the emergence of some common paradigms and concerns. It is particularly fruitful for scholars working in specific disciplinary areas, such as in economics, sociology or political science, to bridge national barriers and begin to develop some common approaches to methodologies, issues and problems. In general, such concern with cross-cultural methodological questions is only beginning to emerge. The Encyclopedia, while not addressing such matters directly, can help by providing a common data base in some areas.

The Encyclopedia makes a major contribution to developing a coherent guide to the literature in the field. The lack of good bibliographical materials and the national biases of much research has until now limited an international literature guide. The International Council for Educational Development and several UNESCO-related agencies have provided useful bibliographical services, but none comes anywhere near the comprehensiveness of the Encyclopedia. The scope of the literature is quite extensive -- indeed very impressive when one considers the

newness of the field. The field needs to maintain continuing bibliographical services and the many national agencies which deal with higher education need to be better served in terms of providing access to the cross-national literature.

Problems of language exist, although English is the predominant medium of scholarly work in the field.

Many important national reports are translated into English and made available to an international audience, but such availability is spotty. The Swedes, for example, are quite thorough in making data concerning the very interesting debates and policies concerning higher education in their country available, in English, to an international audience, while the Germans and the Japanese only rarely translate materials. Access to materials originating from Third World nations, where some of the most interesting debates on higher education policy are taking place, is particularly difficult. And one has the impression that Third World policy makers are very much cut off from the debates taking place in most industrialized nations even when language is not a serious impediment. The newly established European Regional Center for Higher Education in Rumania has been attempting to encourage better links between the Western European and Eastern European nations, and such

contacts are urgently needed.

The study of higher education ramains at this point a "national" subject, but the Encyclopedia helps to bring a sense of international consciousness to the field. The Encyclopedia also implicitly indicates that American scholars dominate the field in terms of volume of research and writing. The American orientation of the Encyclopedia is magnified because it was published in the United States and presumably will be marketed to a largely American audience. Nevertheless, the volumes accurately reflect the fact that American research agendas, concerns, problems and funds have dominated the field. Because the United States expanded access to higher education first and because the problems of mass higher education have been felt first in the United States, other nations have looked to the U.S. for guidance. In addition, the American academic enterprise is very large and a premium is placed on publication for academic advancement. Further, the United States was the first nation to establish a self-conscious academic specialty in higher education, and this infrastructure has been responsible for an impressive volume of literature. Journals have been founded, academic departments have been developed, and publishers have moved to serve a growing field.

It should be kept in mind that the field of

higher education has by and large developed as a response to practical concerns -- and even crises. As universities grew, took increasingly large proportions of public funds, were faced with serious problems of expansion, and in general moved increasingly into the public eye, the need for accurate data and serious discussion of issues facing higher education became clear. Research was conducted to shed light on these and other pressing problems, and a literature was quickly built up. Social scientists in a number of fields began to study higher education as they recognized its importance as a social issue and as funds became available for scholarly research. Research centers were established in universities and in government to foster research and data collection. All of this activity has produced an impressive array of data and analysis, but it should be remembered that in a sense the research and dissemination structure is jerrybuilt out of a perceived necessity for "instant" analysis, and without a firm disciplinary base. The field is still in the process of defining itself. This is not necessarily a weakness, but does reflect the current state of intellectual development.

Conclusion

It would have been easy -- and much briefer -- simply to concentrate on the impressive achievements of the Encyclopedia. As has been

stated, this set of volumes constitutes a benchmark for higher education, and the field is much indebted to Asa Knowles and to Jossey-Bass Publishers for making it available. The Encyclopedia deserves critical analysis precisely because it is so important to an emerging field of study and because it is the international resource. It is hoped that this discussion has not only provided a general perspective concerning the Encyclopedia and some critical discussion of its content and approaches, but has also pointed to some potential directions for research and development in the field. In the opinion of this reviewer, the Encyclopedia does not come up to the extremely high standard set by the Encyclopedia of the Social Sciences, which is in many ways a classic in that many of its articles are lasting and definitive statements on their topics. The Encyclopedia probably contains a few such 'classic' articles, but most are of a more ordinary quality. It is a pioneering effort, and as such will have a lasting influence on the field of higher education studies.

It may be useful to conclude with some specific suggestions for further refining of the field of higher education and of future compendia of research and information.

1) There is a crucial need for continuing bibliographical dissemination in the field so as

to provide 'international' perspectives on current and future issues relating to higher education. There is a need to make national data available to an international audience.

2) The reliance on American research and data on higher education should be lessened. Researchers should be more aware of work in other countries and should make this work available. The production of research elsewhere should be expanded.

3) It should be possible in the future to produce an Encyclopedia at a lower cost by economizing on some of the overly elaborate indexing, perhaps cutting out some less useful data, and possibly using smaller type and less elaborate printing. Serious attention should be given to dropping the essays on the academic fields.

4) It would be particularly useful to group entries by category rather than in simple alphabetical order.

5) There should be a larger proportion of authors, particularly in some areas of the Encyclopedia, from countries other than the United States if possible.

6) In general, the field of higher education needs to be more attuned to its international relevance and to the applicability of

comparative insights to national problems and issues. The Encyclopedia is a major step forward in this realization.

FOOTNOTES

1 For another, more specific, effort to define the field of comparative higher education, see Philip G. Altbach, Comparative Higher Education, (London: Mansell, 1979). See also Paul L. Dressel and Lewis B. Mayhew, Higher Education as a Field of Study (San Francisco: Jossey-Bass, 1974).

2 I am indebted to C. Arnold Anderson for calculating the percentages of entries in his review essay of the Encyclopedia. See C. Arnold Anderson, "The International Encyclopedia of Higher Education: Review Essay," School Review, 87 (August, 1979), pp. 413-419.

3 Encyclopedia, p. 21a.

4 Philip G. Altbach, A Bibliography on Students, Politics and Higher Education, (Cambridge, Mass.: Harvard Center for International Affairs, 1970) and Philip G. Altbach and David H. Kelly, American Students: A Selected Bibliography on Student Activism and Related Topics. (Lexington, Mass.: Lexington Books, 1973).

5 Robert O. Berdahl, British Universities and

the State (Berkeley, California: University of California Press, 1959).

6 For a detailed discussion of the IEA studies, see Alex Inkeles, "National Differences in Scholastic Performance," Proceedings of the National Academy of Education, 4 (1977), pp. 139-200. See also "Symposium: The International Study of Educational Achievement," Comparative Education Review, 23 (October, 1979), pp. 370-421.

7 Frank Bowles, Access to Higher Education (2 Volumes), (New York: Columbia University Press, 1963).

8 The German-American Study Group has produced a number of separate studies of access and admissions policies. These are available through the International Council for Educational Development (680 Fifth Avenue, New York, N.Y. 10019).

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1. Introduction

The field of higher education is now covered by a major encyclopedia. With the aid of a staff of more than 20 persons, the former president of Northeastern University, known as an enterprising man with broad knowledge of higher education, succeeded in putting forward a major source book which is by far more comprehensive than any earlier attempt to present overviews on higher education worldwide.

The International Encyclopedia of Higher Education contains articles on national systems of higher education of 198 countries, 282 topical essays with various degrees of international coverage on major themes of higher education, and 142 entries describing fields of studies. In addition to these 622 major articles, there are about 700 short entries presenting basic information on educational associations, institutions of higher education research, and reports on higher education as well as documentation and information centers. Two of the 10 volumes were reserved for lists of entries, authors, and acronyms, a glossary, name index and subject index.

The Encyclopedia has been issued by a major publishing company which, with its success in covering higher education better than any other publishing organization in the world, is becoming well known internationally.

A review of an encyclopedia is a difficult task, because the aim of an encyclopedia is to surpass the state of knowledge of every person in the field and to offer all those concerned the opportunity to become acquainted with almost any topic for which they may want to broaden their knowledge. As this Encyclopedia has indeed succeeded in covering a broad range of knowledge, a review can touch only upon selected aspects.

There are many indications that the editors had primarily in mind the American reader; it is doubtless the primary task of an expert from the U.S. to assess the quality and usefulness of the Encyclopedia. On the other hand, it may be interesting for American experts in this field, as well as for users of the Encyclopedia from other countries, to read the comments of a non-American who has had the opportunity to do comparative research on higher education.

This review essay will address primarily the international scope of the encyclopedia. Some general comments on the Encyclopedia will also be given, thus adding a few observations to Philip G. Altbach's thorough and persuasive re-

view.

2. The International Scope of the Encyclopedia

2.1 The International Approach

Any reader who has some experience of the difficult tasks of collecting information from many countries in the world, or developing concepts and schemes on higher education not biased by the experience of one's own country, and of presenting information in a way that demonstrates the variety and at the same time explains the variety in a comparative way, is bound to admire the enormous achievements of the editors. The Encyclopedia offers a wealth of valuable information on higher education all over the world.

It offers, first of all, overviews on the higher education systems of 198 countries. A general scheme of major topics treated in those essays -- the higher education system; legislation; types of institutions; levels of education, admission, administration and financing, programs and degrees, financial aid, teaching staff, research, and current trends -- enables the reader to do some comparison on his own. Second, regional analyses are presented in order to give some insights on the commonalities, differences and peculiarities of certain geographical-cultural areas. Third, the Encyclopedia

is a rich source book on archives, libraries, publications, research and documentation centers on higher education and academic and professional associations all over the world. Fourth, the glossary helps to identify and to explain terms used in discussing types of institutions, educational concepts, organization, etc. from many countries. Fifth, many major essays report on several countries or discuss topics from a comparative point of view. Sixth, persons from about 70 countries were involved in processes of conceptualization, exchange of information, and writing the text.

If we try to assess the degree to which the Encyclopedia is truly international in coverage, we have to take into account difficulties of international cooperation and limits of comparative research in the areas handled by the encyclopedia. We cannot evaluate by a perfectionist standard. One obvious way of searching for appropriate criteria is to examine the aims implicit in the editors' preface.

The editors cite the national overviews and regional analyses as well as the entries on institutions, documents, etc. from many countries. They mention with obvious pride the large numbers of foreign authors and consultants. Following a definition suggested by the International Council for Educational Development, a distinction is made between national, interna-

tional and comparative studies; according to the introduction, all three approaches can be found in the Encyclopedia. It is hinted that whereas most topical essays and entries on fields of study should have included more international information, this aim could not be realized in a satisfactory way in all cases. Finally, the editors claim that it was an advantage for the quality of the Encyclopedia that it was assembled by independent editors based at a university rather than being produced by a government agency or international association. These statements of the editors suggest three problems, as far as the international scope of the Encyclopedia is concerned: First, it seems that there did not exist any clear-cut general concept as to how the major entries ought to be understood as being international or comparative. According to the explanation given, it was more or less left to the authors to decide how much information they would include on countries other than the United States. Second, no priorities were set as to which essays definitely should cover wide information on many countries and take a comparative perspective. Only in the case of university administration do the editors make clear that they chose to present only information on the United States. They justify this decision as follows: "It is generally recognized that the United States has been one of the most progressive and innovative nations in the adaptation of general management principles

to college and university administration." (pp. 25a-26a) If the editors really thought that the U.S. was one and only one of several such nations, they also could have covered those countries. Third, -- not surprisingly -- the editors stress that many authors experienced enormous difficulties in presenting an international or comparative analysis.

2.2 The coverage of the reviewer's institutional environment

Reading an encyclopedia always compels the reader to admire the wealth of information given. One might be fairly knowledgeable or experienced in some of the areas taken up by the Encyclopedia, but in most areas one has the opportunity to search for new information. One easy way to assess the quality of the information new to me is to take the example of what the Encyclopedia provides about those aspects of higher education in Germany that I am familiar with. If those matters are treated properly, I could inform my friends in other countries by citing the Encyclopedia, and I would be inclined to rely on the accuracy and soundness of the Encyclopedia's entries in fields with which I am less familiar. Therefore, I think, it is justified to start with this worm's-eye perspective.

As I am the director of a center for research on higher education and work that was

founded after the publication of the Encyclopedia, I cannot expect to find a description of my center. But I am curious to know how Gesamthochschule is handled, because the center is based in such an institution. The glossary offers a convincing, brief definition both under the German term and the English translation "comprehensive university". The subject index, however, does not include the term in spite of there being almost 20 percent of the total pages of the Encyclopedia filled by indexes. A careful reading of many different essays shows that the comprehensive university is touched upon on many occasions. Since the Comprehensive University of Kassel claims to be one of the very innovative institutions in the Federal Republic of Germany, I have to be pleased to find under the heading of "Innovation" not only a very favorable mentioning of comprehensive universities in general but even the name of one such institution - unfortunately erroneously named "Constance", which is not a comprehensive university in the strict sense. In the essay on the Federal Republic of Germany I get confused about the character of comprehensive universities: On the one hand they are -- incorrectly -- mentioned among the institutions typically requiring for entry the termination of the academic track of secondary educa ion. On the other hand their aim was correctly mentioned as integrating the traditions of both universities and Fachhochschulen and thus offering two schemes of entry:

one accepting students from the academic track and the other accepting persons who have finished higher vocational school. Actually the entering students are about evenly divided between those two routes of entry.

Reading further essays one finds a substantial amount of incorrect information on the Federal Republic of Germany: that there exist, in addition to Habilitation, two levels of doctorates, that one might be awarded the doctorate in connection with a state examination without additional achievements, that those passing a state examination will be awarded a Diplom degree and that there are plans to introduce a Lizenziat. Most of this misinformation is given in various topical essays, not in the essay on the national system of higher education in the Federal Republic. Because there might be disagreements on interpretations of non-factual matters, I have restricted myself to these factual examples. If the case of the Federal Republic of Germany could be considered a typical one, I would hesitate to rely on the Encyclopedia; I would want to consult additional sources.

2.3 Essays on National Systems of Higher Education

As stated above, the essays on national systems of higher education certainly constitute valuable insight. According to a few examples

checked, it would not be fair to say that the information given on the Federal Republic of Germany is generally misleading. The essay, not signed by an author, is basically correct. But in addition to the inconsistent treatment of Gesamthochschulen, one is surprised to read: "Salary and status in industry and in the civil service are determined solely by the degree of academic qualifications": In spite of justified criticism about credentialism, this is obviously a gross exaggeration. Moreover, only very careful reading gives the reader a chance to avoid the mistaken impression that the Max Planck Society -- the semi-governmental association for basic research -- is primarily involved in defense and industrial research.

In presenting figures about institutions of higher education the authors do not present the total number of Fachhochschulen (vocational colleges, about 150), but mention the figures of membership at the Westdeutsche Rektorenkonferenz. This seems to be caused by the inappropriate notion that the Westdeutsche Rektorenkonferenz might play a role similar to that of accreditation associations. In reality, however, the recognition of an institution solely depends on state agencies; the small figure was due to the fact that the Westdeutsche Rektorenkonferenz had invited rectors of Fachhochschulen to join their association only just shortly before the conception of this essay. A second example, the

essay on higher education in Japan written jointly by an American and a Japanese, who both are known experts on Japanese higher education, contains, as far as I can judge, only two minor errors, and offers a comprehensive overview.

The third example, the essay on the United States, is very helpful for the foreign reader in understanding the American scene. The American expert might argue that there could have been more information about differences between the several states in the U.S., but probably will be satisfied with the generalizations offered. It is also obvious that the author, a member of the staff of the Encyclopedia, has foreign readers in mind and underscores findings which might be helpful for them to understand this country.

The proposals for structuring the essays on national systems obviously were successful in guaranteeing the presentation of certain standard information about each country, but I doubt whether they permit a vivid picture. The reader does not get to know that German students can easily change universities before getting their first degree, that universities in the United States have a credit system, and that Japanese junior colleges have hardly any male enrollment, to take only a few examples. A somewhat more lively description of characteristics could have been helpful for the reader. The regional anal-

yses offer more comparative views. Some of them add important insights in addition to the essays on national systems, whereas others are more or less superfluous, given the information presented in the essays on national systems.

2.4 Contributions by Non-American Authors

One way of promoting international and comparative views presented in an encyclopedia could be to invite authors from many different countries to contribute entries. The editors have significantly striven for an international representation. For example, the 15 members of the Editorial Advisory Board came from 10 countries. Also, 10 nationalities were represented among the 18 members of the Board of Consultants.

It is quite impressive to read: "The 588 authors...are located in 69 countries throughout the world, representing 211 colleges, universities, and academic institutions" - especially if one takes into account that there exist "international" handbooks and encyclopedias in other fields written almost exclusively by authors from the United States.

The figures become less impressive, though, if one goes beyond the first glance. 62 percent of the authors are from the United States, followed by 7 percent from Britain. There are only three further countries where 10 or more authors

are based: 17 from Canada, 16 from France (many of them not French, but working at international institutions in Paris) and 10 in Japan. There are 8 entries from West German authors, among them 7 descriptions of single institutions in Germany and only one broader essay.

The topical essays are the most important part of the encyclopedia, as far as international and comparative views are concerned. Here, primarily authors from countries other than the United States have written those essays specialized on other countries as well as on international organizations. Among the authors, however, who wrote topical essays that do not show any regional limitation in their topic, 75 percent where from the United States, 14 percent from Britain and Canada, and only 11 percent from other countries.

There are, undoubtedly, convincing reasons why the majority of authors of topical essays that are in an international encyclopedia on higher education not limited to certain areas are likely to be Americans. First, if we had exact figures on the number of persons involved in research on higher education, we would certainly find that more than half of them are based in the United States. Second, an international encyclopedia in this field has to take into account that probably more than half of the copies are to be sold in the United States. As

far as my impressions and the impressions of many of my American colleagues involved in comparative higher education are concerned, the international interest of the majority of American scholars and administrators in the field of higher education is, to put it mildly, not very strong. It is certainly easier to elicit the interest of these people if predominantly familiar views and voices are offered. Third, the incredible work load to put forward an encyclopedia might have increased beyond feasibility if the editors had tried to establish a truly internationally authored encyclopedia.

Nevertheless, the Encyclopedia might have gained considerably in international and comparative perspective if more authors from non-English-speaking countries had been included in writing major entries.

2.5 International Information and Comparative Views in Major Articles

The International Encyclopedia of Higher Education is, without any doubt, the single most important source available today offering broad information on many aspects of higher education as well as presenting important comparative insights. Many experienced scholars in comparative analysis have written important entries. The staff of the Encyclopedia has contributed significantly to the wide range of international

information. Many authors have collected information from a broad range of countries. Therefore, most of the topical essays or entries on fields of study are very stimulating for the reader in the direction Clark Kerr points to in the Foreword: "The transportability of alternatives is made possible in many cases by the universality of knowledge."

Different ways are chosen to pursue the international goals of the Encyclopedia. In some cases, as for such topics as access of minorities, archives, libraries, cooperative education, and science policies, topical essays were divided according to countries, areas or single institutions. This makes it easier to convey very detailed and accurate information, but frequently hands the burden of a comparative analysis over to the reader. In the majority of cases, the authors try to take a world-wide scope. Some give a brilliant account, and these are in general the most significant entries, but others remain very selective and sketchy, or obviously misunderstand developments abroad. A convincing compromise has been made in some topical areas, where authors choose examples from a few countries to demonstrate the variety of international experiences: The entry on "Unrest, Campus" is a good illustration of this compromise.

Unfortunately, there are a substantial num-

ber of important topical essays which lack any international scope. In most cases, the authors do not offer any significant explanation for this. In a few cases, an entry focuses explicitly on the United States, such as "Legal Status of Faculty Unionization in the United States". The reader who knows other countries is bound to ask why the essay does not discuss faculty unionization internationally; this certainly could help the American user of the Encyclopedia to understand this phenomenon in his own country much better.

The preface gives some clues why some topical essays focus solely on the United States. The editor-in-chief, Asa Knowles, explains that he influenced the encyclopedia in stressing heavily "administrative practices and procedures" and decided to present many topics in this field primarily with respect to the United States, since he considers this country especially "progressive and innovative" in this area. This is certainly a possible choice, but it would be preferable if an international encyclopedia is not a one-way road in its "heart".

There certainly could be another "heart" of the Encyclopedia - the field of knowledge in higher education or higher education research. The author of the essay "Higher Education (Field of Study)" decides without further explanation to offer information only about the U.S. and

Canada. He may be right, if he takes "field of study" strictly in terms of a field which can be taken as a field of concentration by a student, because there are hardly any places outside the United States where higher education can be such a field of concentration. Since, however, most entries on "Field of Study" discuss their topics as fields of knowledge, one does not understand this restriction in the case of a topic which could have been a major importance. Also, the overview given at the end of the article is somehow strange. First, organizations named there are not associations on higher education as a field of study or field of knowledge, but university associations. Second, cross references, which are given very frequently and voluminously in other articles, have been omitted here.

The entry on "institutional research" at least offers an explanation why information is given only about the U.S. and Canada; the explanation, however, is, as will be discussed below, far from being satisfactory. The essay on "Sociology of Higher Education" crosses national borders somewhat implicitly; the entry on "Economics of Higher Education" takes it for granted that economics is an international field per se, but does not discuss major approaches in different countries. The article on "Statistics in Higher Education" informs in detail about international data gathering. The essay on "Compara-

tive Higher Education" offers by far the most information about research in higher education in other countries. As other authors do, too, the author of this article had to take into account that comparative higher education is still in a very early stage of development; therefore most information is aimed at giving persons interested in comparative research on higher education only a basic overview on higher education research abroad. Finally, the essays "Periodicals, Higher Education", "Publications, Higher Education" and "Literature of Higher Education, Sources of and Access to" make clear that there is indeed research on higher education outside the United States which could have been mentioned and discussed in in-depth-essays on this field of knowledge.

2.6 Headlines of Essays

The systematization of an international handbook or encyclopedia is a difficult task, because we do not only find different terms world-wide, but different ways of institutionalization in higher education. It might be especially difficult for Americans to use broad international concepts and then try to put their own case somehow under the heading chosen, because the U.S. system of education is unique in fostering almost a compulsion to create trademark-like terms on certain phenomena and movements to promote both the term and its content.

These labels might have their merit in a huge system of higher education heavily influenced by market mechanisms, but they are not necessarily enlightening for a systematization of an encyclopedia.

If we make a thought-experiment on how the systematization of an encyclopedia of this kind might have been if it had been published in Britain or Japan — to take two cases where we find more structural similarities or common historical roots with the United States than in France or Germany — , one probably could agree that more than 80 percent of the headlines for topical essays not explicitly limited to single countries or areas could have been identical. The question remains, however, what the consequences are of other more nationally-biased choices of systematization.

In some cases the American as well as the non-American reader obviously will miss the opportunity of getting broader information as well as comparative insight. For example, we observe efforts and measures in many countries to ease access of disadvantaged groups. There is a variety of measures such as quotas according to social origin, quotas for hardship cases, lottery systems, equivalences of school and occupational prerequisites, etc. All of these have their strengths and weaknesses in terms of administration and legitimation. It would broaden

the view among Americans to understand their own situation, as well as enabling non-Americans fully to comprehend the American debate, if "Affirmative Action" had been presented in such a frame instead of just offering a national essay.

In the case of "Cooperative Education" it might be understandable that the term was chosen because it is used at the university (Northeastern) which substantially supported the Encyclopedia. The author of one of the entries explicitly discusses this confusing term as well as weaknesses of alternative terms. There remains, however, a tendency in the article on "Cooperative Education Worldwide" to focus on "children" of the American concept rather than on traditional functional equivalences in other countries.

"Institutional Research" is another example of a more or less national, U.S.-centered term. If one follows the definition given by the authors of that entry, this kind of research focuses on several aspects within the frame of (in most cases single) institutions of higher education and is in many cases closely related with innovation and improvement of the activities of the institution. It is debatable, of course, whether this term "institutional research" is preferable to, for example, the term "research and development in higher education", as chosen in Europe by the corresponding association

(European Association for Research and Development in Higher Education). At any rate, there are corresponding, although much less numerous, institutionalized agencies for applied research on higher education in other countries, too. The North American pattern of associating such institutions closely with the general administration of a university is more or less unique and reflects the power of the president and central administration in that area. In Germany, on the contrary, this would be in general considered to be the least desirable way of institutionalizing such research. The authors of the entry "Institutional Research", however, are so much confined to the American pattern of "institutional research" that they exclude any pattern which does not fit it completely: "In Europe...programs offered, admissions and degree requirements, staffing, and budgets are often controlled by legislative action, while many administrative functions are performed by members of the state bureaucracy. In this context, institutionally initiated studies and analyses in support of informed decision making must either focus on external controlling bodies or on areas in which the institution is able to take action. British universities have a somewhat broader range for decision making...The tendency in both Continental and British institutions is to co-opt faculty for ad hoc studies of major issues rather than to develop permanent analytical staff". The authors take this as a

reason to report only on the U.S. and Canada. They obviously misunderstand the relationship between state and universities in most European countries, where in most affairs governments and institutions interact - supported by different formal powers according to the matter under consideration. And they might have recognized that the one sentence about the European equivalences in research is misleading, if the term given as headline was not tempting them to handle this problem in such a superficial way.

There are, finally, also examples where well-informed authors start their presentation from the nationally influenced heading and discuss thoroughly and convincingly functional equivalents in other countries. An editor based in Britain or Japan certainly would have chosen the heading "graduate education" rather than "Graduate and Professional Education", which we find in the Encyclopedia, because there are many countries in the world which offer advanced courses for students who have been awarded a first degree, while it is the typical pattern of the U.S. that some of the professional education begins at the same stage. If the essay had to focus on that stage, the author could have explained commonalities and differences of higher education after completion of the first cycle of studies, including the peculiarity of professional education in the U.S.

As the American perception led the definition in the case of this Encyclopedia, the author in his profound article decided to explain to the American reader that in other countries most of professional education is offered at an earlier stage. He makes the reader aware of this difference and its causes as well as of the reasons for different degrees of institutionalization of graduate education, but in this way he was compelled by the headline to discuss other stages of higher education, too, as was certainly not intended by the systematization.

2.7 Limited Coverage of Some Countries

Whereas it is fairly easy to see which countries are given special emphasis in the entries, limitations of coverage are not readily perceived just by reading the essays. One way of demonstrating the difference could be to count the number of references offered under the heading of a country in the subject index. This of course is not a perfect way of assessing the quantity of coverage because the volume of information given to each subject might be very different. For example, there are about 1,100 references to the United Kingdom and almost 1,500 to the United States, but it is obvious that information given on the U.S. exceeds that given on the United Kingdom much more than is indicated by the difference in sheer numbers of

references. But the number of references under the headlines of selected countries might be a significant account as far as fewer entries about some countries will at least signal that there is less information on their systems of higher education than for those of nations that are cited more often. Following the United States and United Kingdom, there are

- more than 800 references to France,
- more than 700 to Germany (in general and to the Federal Republic alone),
- more than 600 on Canada,
- more than 400 on Japan,
- more than 300 to the USSR, to India, Australia, Italy, Netherlands and Sweden,
- between 100 and 200 to Spain, Austria, Brazil, Poland, China (in general and to the People's Republic), Nigeria, the Philippines, Egypt, Hungary and Czechoslovakia.

Several countries have been omitted here. Several further European countries are mentioned more than 100 times, but some of them less often, for example Romania and Portugal. There are fewer than 100 references to most of the Third World countries. There is not any convincing yardstick for judging which countries are over- or under-represented. In general, it can be said that the coverage of East European countries is very limited. If one looks at the coverage of the USSR, it is obvious that this

country has been primarily addressed in entries on fields of study, the essay on the national system of higher education, the corresponding regional analysis and finally on research and science. Most topical essays pay only marginal attention to East European countries. Obviously, many authors question the need to include these countries in comparative studies; differences between systems of higher education of different regions and political and cultural contents certainly set limits to the usefulness of comparative approaches.

There are surprisingly many entries on Third World countries, if one takes into account to what extent most people in Europe and North America are inclined to pay attention primarily to their own region. But if somebody wants to find serious comparative interpretations on higher education in the Third World, he should - in addition to the regional analyses - consult other publications.

In general, the index makes one aware that the broad coverage of many countries is impressive. If the reader wants to get to know a system of higher education of a certain country in more detail than offered in the entries on national systems, he obviously could succeed very well, in the case of many countries, if he reads with the help of the subject index.

It is difficult for a reviewer to assess what criteria determined editors' decisions concerning desirable lengths of essays. If we look at groupings of topical entries, we find Science Policies (108 pages) on top, followed by "Exchange, International" (94 pages), "Religious Influence in Higher Education" (70 pages, sic!) and "Libraries" (58 pages). The groupings, however, are somewhat arbitrary, but also the lengths of single topical essays offer surprises. Because this Encyclopedia will surely be a document for future scholars who may want to assess the state of thought in higher education in the 1970s, as Clark Kerr points out in the Foreword, our era might be looked upon later as very ritualistic, because more information is offered on "Academic Dress and Insignia" than on "Curriculum and Instruction".

In comparison to other handbook-like publications on systems of higher education or on certain aspects of them, the Encyclopedia includes very limited statistical material. In many cases, the reader would have been happy to get some basic data; heavy presentations of data, though, might have provoked the reader to consider the Encyclopedia being outdated in a few years.

3. General Comments

3.1 Types of Entry and Systematization

In general, readers will be satisfied with the types of entries and systematization chosen. The preface offers quite convincing explanations about choices made.

The article on national systems of higher education as well as the topical essays would definitely be more or less the nucleus in any corresponding handbook or encyclopedia of a more moderate scope. One is surprised to find overviews on 142 fields of study in this context, but they are -- in spite of enormous quality differences obvious to the reader -- very valuable. The encyclopedia contains only a limited range of entries on single entities: there are overviews on major reports on higher education, but not on single universities or influential persons. This choice is convincing, because the entries on major reports help one to understand the topical essay and entries on national systems more in depth, whereas single institutions are often presented in directories and the choice of persons certainly would have been fairly arbitrary. The categories on educational associations, centers and institutes of higher education research as well as the International Directory of Documentation and Information Centers overlap to a considerable extent. There

might have been a better choice of systematization.

The lists and indices offered fill more than a fifth of the Encyclopedia. One can only wonder whether this was necessary and whether better choices were out of reach. It does not seem necessary to have an alphabetical listing of entries together with a list of entries classified according to seven categories both in the first volume. The list of acronyms (87 pages!) could have been included in a smaller fashion somewhere else (for example in the subject index), but maybe some readers will be happy to find entries such as the FIA (Fédération Internationale de l'Automobile) easily in an encyclopedia on higher education. The glossary is surely very helpful. The subject index which comprises almost 600 pages is not easy to handle in some cases because of the way groupings of categories have been chosen; in addition, it is a pity that the editors did not take up all the terms here they had included in the glossary. But if a reader really wants to collect information scattered in the Encyclopedia and takes time to check carefully, the subject index is a very helpful tool, indeed. The articles offer many references, as far as institutions, associations and publications are concerned, which might be valuable for further information. The cross references, however, are not the major strength of the Encyclopedia.

3.2 Priorities of Content

The encyclopedia covers a very broad range of topics. As there is enough space for hundreds of articles to have a length which can be taken in thorough handbooks, the reader has the opportunity to get well informed about many areas in higher education. Of the total of 282 topical essays, there are more than 30 each on resources (archives, libraries, etc.), as well as on internal organization and finance, about 25 each on higher education in general, on international aspects of higher education and on special kinds of institutions or types of higher education programs, and about 20 on research and science. Ten or more entries each can be found on topics such as regional analyses, access and admissions, staff, research on higher education, higher education and employment, higher education and society (including legal aspects) as well as particular associations, organizations and projects relevant to higher education. There are fewer than ten entries each on subjects like teaching and learning, formal elements of studies (flows, degrees, etc.), and students, as well as cooperation between institutions of higher education.

The encyclopedia does not care about a very "balanced" coverage, as far as the range of possible interests of readers might be concerned. There are definitely two hobby horses according

to major areas: The first one is on internal administrative affairs of institutions of higher education; this reflects, as pointed out in the preface, inclinations of the editor-in-chief, who previously had edited the Handbook of College and University Administration. The second one is on archives, libraries, reference materials, etc.; here, the staff of the Encyclopedia ought to have curbed their enthusiasm. The lengthy presentations are beyond any considerable balance, in many cases they repeat the work of other reference books. The detailed descriptions of a small number of huge libraries are not very helpful. Also, it does not meet the purpose of the Encyclopedia that an entry on "Library Administration Research" is twice as long as an essay on "Higher Education (Field of Study)".

These hobby horses might not have been apparent if other major areas had been represented fairly well. One gets the impression, though, that there is little concern about teaching, learning and the student. Admissions, financial aid and degrees — matters where administration is involved — are well represented, but curricula, teaching methods, socialization processes, transfers, guidance and similar fields, which have been major topics of research and which could have been documented fairly well, are neglected areas of the Encyclopedia.

3.3 Quality of Entries

There are many, obviously good factual accounts, many systematic analyses and many brilliant interpretations in the Encyclopedia. In general, the Encyclopedia demonstrates that higher education has become an important field of knowledge.

Of course, there are significant differences according to the depth of arguments, the accuracy of information presented or the extent of coverage of major knowledge available in this field. This cannot be avoided. Unfortunately, the only generalization about lack of quality has to be, as far as I can judge, that there are too many articles weak in international coverage and comparative insight, despite a significant minority of articles that excel according to this criterion.

Among the numerous major topics of the Encyclopedia, two examples may be chosen here for a closer view. The field of access and admission may be taken as an example of cocern for both structure and content; in addition this is a field where we can easily find brilliant expertise in the United States. The field of manpower planning touches upon the relationship between education and its wider context and can be taken as an example of an area where interest in the U.S. is weaker than in many other regions of

the world.

Problems of access and admission are not assembled in a grouping of topical essays, but discussed in several separate essays. This, of course, reduces the scope of single essays; therefore it is more difficult for the reader to understand, for example, how admission criteria are related to mass or elite concepts, to social selection, etc.

The different entries in the field of access and admissions offer ample information on many countries. Among them, different strategies were chosen to offer international information. The entry on access presents a model of elite and mass access. This model is quite plausible, but permits only a very broad, and all too general view on access in different countries. The essay on admissions convincingly illustrates a variety of different procedures and mechanisms. One could have wished that more space might have been allotted to this topic in order to demonstrate the inner logic of admissions systems. "Access of Minorities" has been divided according to different cases. Most entries are very knowledgeable accounts. The good overview essays on Articulation, one on Europe and one on the U.S., as well as on Examinations and Tests are helpful in understanding the field.

One gets the impression that the editors

succeeded in receiving well informed entries. This holds true in spite of surprising gaps: for example, the much discussed admissions system of Japan is hardly mentioned at all. But some more coordination on part of the editors in order to avoid a falling apart of an interrelated field could have been very helpful.

In the case of Manpower Planning, concern about a coordinated coverage of the field is evident. After an overview entry, five essays follow on special aspects. The overview essay as well as the entries on "Role of Government" and "Higher Education in Manpower Problems" explain well the aims and shortcomings of manpower planning in general. One would have expected, though, that the latter two entries would offer more information on major planning projects, their approaches, methods, and targets as well as implementation. It would have been proper to make clear the aims and problems of analyses for planning purposes, for example, manpower requirement forecasts on the one hand, and manpower planning as a decision making and implementation process on the other hand. The two essays are not very helpful in understanding the variety of approaches. The entry on "Role of International Agencies" compensates somehow for these weaknesses, for it offers, in addition to a good overview of planning activities of primarily the Organization for Economic Cooperation and Development, the International Institute for Edu-

cational Planning and the International Labour Organization, an introduction to the methods applied. The entry on "Migration of Talent", which also could have been located as a separate entry in the Encyclopedia instead of being put under the heading of Manpower Planning, again offers a convincing overview. The entry on "Role of Industry" is the only one explaining quite a variety of methods; on the other hand it lacks any international coverage. The reader of the six essays, obviously, has a good opportunity to understand the basic problems and to become well informed about some aspects; one would have been pleased, however, if the considerable overlap had been avoided and some more basic information had been given.

3.4 Normative Leanings

Entries in an encyclopedia ought not to present primarily the views of their authors; they should give a fair and somewhat neutral account of major approaches and views. If, however, major topical essays try to remain as neutral as possible, they may lose the flavor needed in order to attract readers to learn from reading these articles. In general, the topical essays offer a broad overview without completely avoiding a coloring by their own thoughts and approaches; this has to be considered appropriate for such an encyclopedia.

There are some articles which are able to present both the range of predominant views as well as their debatable implications. For example, a remark such as the following presented in the entry on "Economics of Higher Education" is certainly helpful for understanding the strengths and weaknesses of a field presented: "The cornerstone of economics as it is applied to education is that the higher earnings of graduates (relative to nongraduates) represent a true increment in productivity. This assumption has, however, often come under attack."

An encyclopedia of this kind presents a variety of views, "schools" of thought, political positions, etc. Nevertheless, the reader will find some dominant views. Many of them will be more easily discovered twenty or thirty years later when readers try to discover what the climate of opinion had been in the seventies. Some of the dominant views, though, can be recognized already today. Although a reviewer cannot be expected to have read all entries and although generalizations of this kind will not be fair to some entries, a few comments may be permitted:

(a) Many entries take it for granted that a strong university administration is desirable.

(b) A large number of entries fear major threats to the proper functioning of universi-

ties if the power of the government to influence higher education is too strong. They are less concerned, though, that other societal influences might exercise undue pressures. The favorable mention of a "symbiotic relationship" between business enterprises and higher education, in the article on the system of higher education in the United States, clearly points to a widespread lack of concern about such influences.

(c) In most articles, students are not viewed as important agents of institutions of higher education; rather, they are considered to be a separate, target group with which the administration and faculty, as the true representatives of the university, must deal.

(d) Most challenges of traditional views in higher education that were presented in the disputes during the late 1960's tend to be considered negligible and of no lasting importance.

Any reader of larger parts of the Encyclopedia, therefore, would agree with Philip Altbach's statement: "The Encyclopedia is an 'establishment' series of volumes."

Such leanings are understandable, if they represent a common view among those persons respected in this field. In a few articles, however, tolerance and intelligible standards were lost, if it comes to dissenting views within the

academic community, especially if the presentation turns to the "radicals". To cite one example: "Holders of the radical view of the university believe that the liberal notion of the desirability of the social promotion of individuals through higher education is totally inadequate. In their eyes such an approach enhances the power of those who are exploiting the less fortunate. Radicals see the university as a key agency they must control if the essential overall transformation of society is to be achieved. To implement their ideas, radicals know that they must increase their number in university faculties...If some of the radical views of the university were to be widely accepted, the historical academic emphasis on reason, excellence, community, objectivity, and independence could be replaced by increasing adversalism, politicization, subjectivity, and collectivization. This replacement of values is a major threat to the future of universities as intellectual centers." (pp. 1868-9)

4. Conclusion

The Encyclopedia is a very impressive source book on higher education. It certainly has been a worthwhile effort to compile these volumes in order to broaden the views of readers on many aspects of higher education and its international variations. For many years in the future, these ten volumes will be utilized as

the first source by which to get acquainted with topics of higher education that one does not know well and to locate major centers of research and documentation all over the world.

The editors succeeded in completing the work within five years. As compared to other important encyclopedias, the literature and other sources mentioned are fairly up to date. Many of the articles will even be considered worthwhile reading after many years, when they may have lost some of their currency.

There are some impressive analyses and good overviews. In general, most articles are important for scholars, administrators or anybody else interested in higher education. They present satisfactory discussions and give a key to more detailed information, even if they are not necessarily well based or theoretically complete in their coverage.

The Encyclopedia addresses especially readers interested in college administration as well as those using libraries and other sources on an international level. Some fields, such as educational and socio-psychological topics, have been somewhat neglected.

For some parts of the Encyclopedia, the editors succeeded in obtaining articles that adequately cover a certain range of topics with-

out appearing to be overstandardized. In many broader topical areas, however, experts among the readers will observe a lack of coordination of individual articles according to schemes which might have ensured greater completeness and a higher standard of analysis and information.

The Encyclopedia has not always been sensitively handled in such a way as to avoid some normative leanings which cut across the majority of articles. The underlying tendency is to favor a strong presidential administration, to demand protection of autonomy against government while easily accepting other societal influences, to consider students rather as target groups than as actors of higher education, and to be somewhat intemperate about "radicals".

The international scope of the Encyclopedia is impressive, if we take into account the present state of knowledge even among many experts on higher education. It can be hoped that the Encyclopedia will help American scholars and administrators to become more interested in and better informed about higher education in other countries. In many cases, an account of several interesting cases all over the world is the appropriate presentation. A reader interested in a broad international coverage, however, will often be disappointed with the limited range of knowledge and lack of comparative understanding

evident in a substantial number of topical essays. More efforts should have been made to exclude some contributions by American authors who cover other countries only with a few stereotyped remarks. An improvement of the Encyclopedia certainly would have been possible, if more authors from other countries had been included.

These critical remarks should not be interpreted as suggesting that this Encyclopedia is not an admirable source book. It will certainly contribute to a much better understanding of higher education in many areas of the world. In this way the Encyclopedia may itself foster a development which will make it easier, in a decade or a more distant future, for some individual or group to attempt to emulate the undertaking that Asa S. Knowles and his team have so courageously carried out.